

Hussey Seating Company)	Departmental
York County)	Findings of Fact and Order
North Berwick, ME)	Air Emission License
A-374-71-I-A)	Amendment #2

After review of the air emissions license minor modification application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

1. Hussey Seating Company (Hussey) was issued Air Emission License A-374-71-F-R on May 25, 2001, permitting the operation of emission sources associated with their boilers and surface coating process, located in North Berwick, Maine. The license was amended on August 29, 2001 (A-374-71-G-M).
2. Hussey has requested a minor modification to their license to replace its existing high solids, wet finish, paint line with a finishing system that employs state-of-the-art parts washing with a powder coat finish. Incorporated in this change is the addition of three new natural gas fired heaters having a combined heat input of 9.6 MMBtu/hr and the subsequent removal of three heaters having a combined heat input of 7.6 MMBtu/hr.

B. Emission Equipment

Hussey is authorized to operate the following equipment:

Fuel Burning Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (scf/hr)</u>	<u>Fuel Type</u>	<u>Stack #</u>
Boiler B-3	1.33	1,291	natural gas	B-3
Heater #10	2.00	1,942	natural gas	10
Heater #16	4.13	4,000	natural gas	16
Heater #7	2.64	2,563	natural gas	7
Heater #21	1.46	1,417	natural gas	21

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Fuel Burning Equipment (Continued)

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (scf/hr)</u>	<u>Fuel Type</u>	<u>Stack #</u>
Burn-off Oven	1.00	971	natural gas	P-8
First Stage Washer Heater	6.0	5,825	natural gas	P-15
Dry-off Oven	2.4	2,330	natural gas	P-16
Small Parts Cure Oven	1.2	1,165	natural gas	P-17
<i>Parts Washer</i>	5.30	5,146	natural gas	P-2
<i>Paint Bake Oven</i>	2.00	1,942	natural gas	P-7
<i>Parts Drier</i>	1.00	971	natural gas	P-3

Bold is new equipment

Bold-italics is equipment which will be removed after the change-over to the new process.

Diesel Operated Fire Pumps

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Power Output (hp)</u>	<u>Firing Rate (gal/hr)</u>
Perkins	1.04	143	7.6
Cummins	1.01	137	7.4

Process Equipment

<u>Process</u>	<u>Pollutant</u>	<u>Stack ID</u>	<u>Control Device</u>
<i>Hand Spray</i>	VOC, PM	P-10	filters
Hand Spray	VOC, PM	P-9	filters
Burn Off Oven	VOC, PM	P-8	afterburner
Welding	PM	-	cartridge filter
Woodworking	PM	-	Cyclones/baghouse
Powder Coat Finish	PM	-	filters
Spray Booth	VOC, PM	P-1	filters
Stain Bench	VOC, PM	P-1a	filters
<i>Ransburg Disc Spray</i>	VOC, PM	P-5	filters
<i>Ransburg Disc Spray</i>	VOC, PM	P-4	filters
<i>Touch-up Spray Coater</i>	VOC, PM	P-6	filters
<i>Paint Bake Oven</i>	VOC	P-7	filters
<i>Parts Dryer</i>	VOC	P-3	none
(3) Roof Top Vents	n/a	P-18, 19, 20	none

Bold is new equipment

Bold-italics is equipment which will be removed after the change-over to the new process.

C. Application Classification

The application for Hussey includes the licensing of increased emissions and the installation of new equipment. Therefore, the license is considered to be a minor modification.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Air Regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. New First Stage Washer Heater

The new First Stage Washer Heater (6.0 MMBtu/hr), New Dry-off Oven (2.4 MMBtu/hr) and the New Small Parts Cure Oven (1.2 MMBtu/hr) each fire natural gas. These heaters are not subject to EPA's New Source Performance Standards, 40 CFR Part 60, Subpart Dc.

BPT for the new heaters is the following:

- Use of natural gas.
- SO₂, NO_x, CO and VOC emission rates when firing natural gas are based on AP-42 data dated 7/98 for natural gas fired boilers smaller than 100 MMBtu/hr.
- Emission rates for PM when firing natural gas are based on BPT of 0.05 lb/MMBtu.
- Visible emissions from the stacks serving the new First Stage Washer Heater (Stack P-15), New Dry-off Oven (P-16) and the New Small Parts Cure Oven (P-17) each shall not exceed an opacity of 10 percent on a six (6) minute block average basis.

C. New Powder Coat Finish System

The new powder coat finish system will be replacing the existing high solids, wet finish paint line equipment. This will result in an approximate 90 percent reduction in VOC emissions and an approximate 80 percent reduction in HAP emissions from process sources. PM emissions from this new process will be controlled by the use of filters. Based on this information, the new finish system is receiving BACT.

D. Roof Top Vents

The three new roof top vents will be used to remove excessive heat build up associated with the new finishing system, especially during the summer months. Opacity from vents P-18, 19 and 20 shall not exceed 5 percent on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

E. Annual Emission

Hussey has the following annual emissions (12-month rolling total) **before** and **during** the final process line change-over, based on:

- The licensed natural gas burning equipment operating 8,760 hours per year
- The emergency diesel generators each operating 500 hours per year
- 25 Tons per year of process VOC emissions
- 9.5 tons per year of process HAP emissions

Total Annual Emission for the Facility
(used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC	HAP
Boiler B-3	0.58	0.58	0.01	1.13	0.87	0.06	--
Heater #10	0.88	0.88	0.01	1.70	1.31	0.09	--
Heater #16	1.81	1.81	0.02	3.51	2.70	0.19	--
Heater #7	1.16	1.16	0.01	2.25	1.73	0.12	--
Heater #21	0.64	0.64	0.01	1.24	0.96	0.07	--
Burn-off Oven	0.44	0.44	0.01	0.85	0.65	0.05	--
First Stage Washer Heater	2.63	2.63	0.03	5.10	3.93	0.28	--
Dry-off Oven	1.05	1.05	0.01	2.04	1.57	0.11	--
Small Parts Cure Oven	0.53	0.53	0.01	1.02	0.79	0.06	--
Parts Washer	2.32	2.32	0.03	4.51	3.47	0.25	--
Parts Drier	0.44	0.44	0.01	0.85	0.65	0.05	--
Paint Bake Oven	0.88	0.88	0.01	1.70	1.31	0.09	--
Perkins	0.08	0.08	0.01	1.15	0.25	0.09	--
Cummins	0.08	0.08	0.01	1.11	0.24	0.09	--
Process Equipment	--	--	--	--	--	25.00	9.50
Total TPY	13.5	13.5	0.2	28.2	20.5	26.7	9.5

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Hussey will have the following annual emissions (12-month rolling total) after the final process line change-over to powder coating, based on:

- The licensed natural gas burning equipment operating 8,760 hours per year
- The emergency diesel generators each operating 500 hour per year
- 8.0 Tons per year of process VOC emissions
- 3.0 Tons per year of process HAP emissions

Total Annual Emission for the Facility
(used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC	HAP
Boiler B-3	0.58	0.58	0.01	1.13	0.87	0.06	--
Heater #10	0.88	0.88	0.01	1.70	1.31	0.09	--
Heater #16	1.81	1.81	0.02	3.51	2.70	0.19	--
Heater #7	1.16	1.16	0.01	2.25	1.73	0.12	--
Heater #21	0.64	0.64	0.01	1.24	0.96	0.07	--
Burn-off Oven	0.44	0.44	0.01	0.85	0.65	0.05	--
First Stage Washer Heater	2.63	2.63	0.03	5.10	3.93	0.28	--
Dry-off Oven	1.05	1.05	0.01	2.04	1.57	0.11	--
Small Parts Cure Oven	0.53	0.53	0.01	1.02	0.79	0.06	--
Perkins	0.08	0.08	0.01	1.15	0.25	0.09	--
Cummins	0.08	0.08	0.01	1.11	0.24	0.09	--
Process Equipment	--	--	--	--	--	8.0	3.0
Total TPY	9.9	9.9	0.14	21.1	15.0	9.2	3.0

III.AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Based on the above total facility emissions, Hussey is below the emissions level required for modeling and monitoring.

ORDER

The Department hereby grants Air Emission License Minor Modification A-374-71-I-A, subject to the conditions found in Air Emission License A-374-71-F-R, minor revision A-374-71-G-M and in addition to the following conditions:

The following shall replace Condition 16(C) of license A-374-71-F-R:

16 (C) Emissions shall not exceed the following:

Equipment		PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Boiler B-3	lb/hr	0.07	0.07	0.01	0.13	0.10	0.01
Heater #10	lb/hr	0.10	0.10	0.01	0.19	0.15	0.01
Heater #16	lb/MMBtu	0.05	n/a	n/a	n/a	n/a	n/a
	lb/hr	0.21	0.21	0.01	0.40	0.31	0.02
Heater #7	lb/hr	0.13	0.13	0.01	0.26	0.20	0.01
Heater #21	lb/hr	0.07	0.07	0.01	0.14	0.11	0.01
Burn-off Oven	lb/hr	0.05	0.05	0.01	0.10	0.07	0.01
1st Stage Washer Heater	lb/MMBtu	0.05	n/a	n/a	n/a	n/a	n/a
	lb/hr	0.30	0.30	0.01	0.58	0.45	0.03
Dry-off Oven	lb/hr	0.12	0.12	0.01	0.23	0.18	0.01
Small Parts Cure Oven	lb/hr	0.06	0.06	0.01	0.12	0.09	0.01
<i>Parts Washer</i>	lb/MMBtu	0.05	n/a	n/a	n/a	n/a	n/a
	lb/hr	0.27	0.27	0.01	0.51	0.40	0.03
<i>Parts Drier</i>	lb/hr	0.05	0.05	0.01	0.10	0.07	0.01
<i>Paint Bake Oven</i>	lb/hr	0.10	0.10	0.01	0.19	0.15	0.01

Bold is new equipment

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The following shall replace Condition 19 of license A-374-71-F-R:

(19) Process Emission Sources

- A. VOC emissions from all processes prior to the change-over to the powder process shall not exceed 25.0 tons/yr based on a 12-month rolling total.
- B. HAP emissions from all processes prior to the change-over to the powder process shall not exceed 9.5 tons/yr, based on a 12-month rolling total. The use of xylene shall not exceed 2.0 tons/yr based on a 12-month rolling total. Ethylene Glycol Monobutyl Ether emissions shall be limited to 5.0 tons per year on a 12-month rolling total.
- C. VOC emissions from all processes after the change-over to the powder process shall not exceed 8.0 tons/yr based on a 12-month rolling total.
- D. HAP emissions from all processes after the change-over to the powder process shall not exceed 3.0 tons/yr based on a 12-month rolling total.

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- E. Compliance with the above VOC and HAP ton per year limits shall be demonstrated by monthly mass balance calculations using the amount of material used and the VOC and HAP content of the material as found on the MSDS sheets. Hussey shall maintain monthly records on the premises to document the name and identification of each coating and the mass of VOC and HAP per volume of each coating used on each coating unit, line or operation.
- F. Visible emissions from the cyclones shall not exceed 5% opacity on a six-minute block average basis. Hoppers from both cyclones and the fabric filters shall be emptied regularly to ensure proper operation of the equipment.
- G. Visible emissions from the roof top vents (P-18, P-19 and P-20) shall not exceed 5 percent on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

The following are new conditions to Air Emission License A-374-71-F-R

- (27) Hussey shall notify the Department when the new powder coat line is operational.
- (28) Hussey shall pay the annual air emission license fee within 30 days of **July 30th** of each year. Pursuant to 38 MRSA §353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under 38 MRSA §341-D, subsection 3.
- (29) This amendment shall expire concurrently with Air Emission License A-374-71-F-R.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2003.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: November 4, 2002

Date of application acceptance: November 5, 2002

Date filed with the Board of Environmental Protection: _____

This Order prepared by Mark E. Roberts, Bureau of Air Quality.